Program 1: Basic `if` Statement

Write a program that takes an integer input from the user and checks if it is positive, negative, or zero using `if`, `else if`, and `else` statements. Print the result accordingly.

Program2: Nested `if` Statements

Write a program that takes a user's age as input and uses nested `if` statements to determine and print whether the person is a child (age < 12), teenager (age between 12 and 18), adult (age between 18 and 60), or senior (age > 60).

Program3: `if` Statement with Multiple Conditions

Create a program that takes two integer inputs and an arithmetic operator (+, -, *, /) from the user, then performs the corresponding operation. Use `if`, `else if`, and `else` statements to handle each case and print the result.

Program4: `switch` Statement for Days of the Week

Write a program that takes a number between 1 and 7 from the user and uses a `switch` statement to print the corresponding day of the week (1 for Monday, 2 for Tuesday, etc.). Print "Invalid input" if the number is not between 1 and 7.

Program5: `switch` Statement for Basic Calculator

Write a program that takes two integers and a character representing an operation (+, -, *, /) as input from the user and uses a `switch` statement to perform the appropriate arithmetic operation and print the result.

Program6: Nested `switch` Statements for a Menu

Create a menu-based program where the user can choose between "Vegetarian" and "Non-Vegetarian" options, then display a sub-menu with specific dishes based on the selection. Use nested `switch` statements to handle each menu and sub-menu option.

Program7: Grading System using `if-else` Statements

Write a program that takes a student's score (out of 100) as input and displays the grade based on the following criteria:

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: Below 60

Use `if-else` statements for this.

Program8: `switch` Statement for Month and Days

Write a program that takes an integer from the user representing the month (1 for January, 2 for February, etc.) and uses a `switch` statement to print the number of days in that month. Consider leap year (assume it is a leap year if February is chosen) and handle it with an additional check.

Program9: `for` Loop with `if` Statement for Prime Number Check

Write a program that takes an integer as input and uses a `for` loop with an `if` statement to check if the number is prime. If it's prime, print "Prime Number"; otherwise, print "Not a Prime Number."

Program10: `switch` Statement for Character Analysis

Write a program that takes a single character as input from the user and uses a `switch` statement to check if the character is a vowel (a, e, i, o, u for both uppercase and lowercase) or a consonant. Print the result accordingly.